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COOPERATION WITH FOREIGN COUNTRIES

INFORMATION BULLETIN

1959

WARSAW

No 3

Committee for Economic and Scientific-Technical Cooperation with Foreign Countries
of the Council of Ministers

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COOPERATION WITH ~~ABROAD~~ FOREIGN C

Information Bulletin

1959

Warsaw

No

Committee for Economic and Scientific-
Technical Cooperation with Abroad at
the Council of Ministers

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Resolutions and directives covering the activities of the Committee for Economic and Scientific-Technical Cooperation with Abroad

Editors: W. Adaszewski, E. Kierska, and L. Sulkowski

Telephone: 21-67-03

1. Information on the Talks with Mr. Tuomioja,
Executive Secretary of ECE (European Commission
for Europe) of UN (United Nations)

I. From 4-8 March, Tuomioja, Executive Secretary of the ECE, visited Warsaw on the invitation of the Polish government. The main problems that he wanted to discuss were:

- a. The next session of ECE and its agenda for the period 1959-1964.
- b. Prospects for the development of East-West trade.
- c. The matter of making unofficial working contacts between the secretariats of ECE and CEMA. (Tuomioja wanted to discuss this problem with the Polish government as a member of CEMA.)

II. [The first paragraph is illegible.]

For a long time socialist countries tried to bring to the attention of Tuomioja the danger of such a state of affairs. [Remainder of this paragraph is illegible.]

Tuomioja is trying to utilize the present series of visits to various European countries for support of his efforts.

The western countries of Europe find the present state of inertia of ECE convenient. Because of this, there will be no initiative on their part toward an improvement of the situation, and our initiative toward the activation of the ECE will be met with opposition of these countries.

Hence, not overrating the possibilities of radical changes in the ECE -- until a change in the present political situation in Europe^{is made} -- we convinced Tuomioja that we treat ECE seriously and that we feel that ECE can and should do much in the near future. We also promised to support several suggestions of the Secretariat for the activation of ECE, or for a proper establishment of the work of the Secretariat itself.

During his visit, Tuomioja conferred with Deputy Premier Jaroszewicz, Minister Rapaacki, Professor Lange (now chairman of ECE), Minister Trampczynski, ^{and} Deputy Chairman of the Economic Council of Bobrowski. Tuomioja had a conference, summarizing previous talks, with Deputy Minister Winiewicz.

In these talks, the necessity of activating the ECE and of assigning work of a basic character and over a long period was motivated to the Secretariat by the following factors:

A change in the economic face of Europe indicates the necessity of adapting economic relations to a given situation in a manner that would ensure the development of Europe as a whole. On the one hand, we see a great development of the countries of western Europe. Industrialization of these countries will undoubtedly make them ^{richer} wealthier and will create conditions for a greater trade exchange with other countries. On the other hand, we observe an economic conflict between the various countries, and even groups of nations, of western Europe, and a search for a solution to the difficulties in ^{the} various concepts of

economic integration, which, according to their authors, the main goal is to increase industrialization and international trade exchange. Disregarding the meritorious evaluation of these integration ideas, this solution, or another, of the problem must be reflected in the system of economic relations of Europe as a whole.

All of these events, both favorable and unfavorable, indicate that one of the sensible approaches to the economic problems of Europe is to treat Europe as an economic whole. This should indicate the trend of the work of ECE and its Secretariat. Not questioning the need of an analysis of the current economic difficulties of the advisability of the present work of the Technical Committees -- on the contrary, emphasizing the practical importance and the value of technical cooperation -- we requested in our talks with Tasmioja that the Secretariat place greater emphasis on the problem of a long-term character, and on the undertaking of research connected with the development of so-called infra-structure of the area -- hence, an action to the interest of all countries in the area. We particularly emphasized the necessity of undertaking research work which could become a theoretical base for future ideas of international action for individual sectors of economic policies, particularly investments, undertaken in common interests.

IV. The talks disclosed agreement of attitudes, particularly, on the necessity of undertaking long-term work. We realize, however, that this agreement will not in the least automatically ensure far-reaching changes in the work of ECE and the Secretariat because of the political

situation and of the character of Tasmioja. It does indicate, however, the advisability of supporting Tasmioja in his timid beginnings.

(It was characteristic of Tasmioja to give up his own idea of calling during the next session of ECE a meeting of economic advisors for an informal discussion of the economic problems of Europe, when it became apparent that an agenda for such a meeting, despite its private character, would be difficult to adjust. This example shows that Tasmioja will continue to avoid controversial problems in spite of his personal conviction about the advisability of such action.)

V. Besides a general agreement as to the advisability of ECE undertaking efforts toward the expansion of East-West trade, Tasmioja did not present any basic plans for this. He did, however, present the following two memorandums suggesting that:

a. Ad hoc conferences and consultations be called by him on matters that cannot be solved through any other channel, explaining that this procedure can actually be used in international trade.

b. Socialist countries develop so-called shipping lists covering a period of 5 years. These lists would indicate the possibilities of increased exchanges between the East and the West. The first proposal, we fully supported; the second, we promised to review closely, indicating that our foreign trade is now based on this type of list.

VI. Proposing the concept of long-term work of the Secretariat, we, on our part, proposed that research be undertaken in such fields as the energy balance, the development of transportation means, the

agricultural balance, an analysis of the effects of industrialization of western Europe, and also of the effects of a possible realization of the various plans of economic integration of western Europe.

VII. In addition to matters in the economic field, the problem of a full membership in ECE of East Germany, and the problem of cooperation of the Secretariats of ECE and CEMA were discussed during Tuomioja's visit.

The matter of making unofficial operating contacts between the Secretariats of CEMA and ECE has already been discussed in the past year by Tuomioja in Moscow, at which time representatives of CEMA stated that, in principle, such contacts could be useful. On the other hand, no procedure for such contacts was made.

Recently, on the invitation of Tuomioja, the Secretariat of CEMA, headed by Fadiejew, visited Geneva. However, this was a courtesy visit, and according to the Secretariat of ECE, the delegation refused talks on forms of cooperation.

Tuomioja was delighted with this turn of events, and during the conference with the Deputy Premier Jareszewicz, again brought up the problem. He stated that it seems that there exists a misunderstanding as to forms of cooperation. He realizes the difficulties encountered in making official contacts, which automatically produce the right to send observers by one country to meetings of another country. He is not concerned with cooperation of this kind, but with informal operating contacts ~~by contact~~ invitation.

Deputy Premier Jaroszewicz told Tuzmaloja that we were very happy about the visit of the representatives of CEMA in Geneva, that we consider this as a sign of favorable appraisal by our countries of the efforts of the Secretariat, and that we consider this visit as the first step. Further progress of the cooperation will depend on the Secretariat itself.

We are convinced that relations between both Secretariats will adjust themselves in proportion to the realization of our efforts to treat Europe as a whole.

Deputy Premier Jaroszewicz emphasized that in the territory of CEMA we will make effort toward cooperation between both organizations. Naturally, this will require time and selection of proper forms.

VIII. Evaluating the entire visit, we consider it as useful; it indicates certain, even if limited, possibilities of activating operations, particularly of the Secretariat, which should be utilized by our countries in a proper way.

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2. Transit via Kaliningrad-Magdeburg Inland Waterway

The problem of activating transit shipments from the USSR to East Germany, and vice versa, via Kaliningrad-Magdeburg inland waterway (Zalew Wislany [Frisches Haff] - Wisla River- Brda River- Bydgoszcz Canal - channelised Noteć River- Warta River- Odra River route) has been studied for the past 2 years. In the exchange of views on this subject up to now, the problem has been treated rather theoretically. At present, this problem requires a basic solution because of the establishment of transit tasks for the period 1961-1965 for countries participating in CEMA.

The present situation on the matter of Kaliningrad-Magdeburg transit is as follows:

On the initiative of the USSR, a conference was held in May 1957 in which representatives of the following ministries took part: the Ministry of Maritime Navigation of the USSR, the Ministry of the River Fleet of the Republic of Russia, the Ministry of Transportation of East Germany, and the Ministry of Navigation and Water Economy of Poland. At the conference, the Soviet Union raised the problem, among others, of the organization of the transportation of export, import, and transit shipments via inland waterways.

As a result of the talks, a protocol was signed, with Poland participating (the Polish representatives had neither the authority nor instructions to sign the protocol). The protocol contained the following basic resolutions:

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1. "The conference has accepted the proposition of the Soviet delegation of organizing the transport of export, import, and transit freight between Poland, East Germany, and the USSR via inland waterways of these countries, and has recognized as objective the organization of the mentioned transports."

2. "For the purpose of organizing transports of freight via inland waterways, and of investigating conditions of navigation, the Conference resolved to conduct trial runs between ports of the USSR and East Germany in June 1957."

3. "The Conference considers it advisable that conditions for a further organization of permanent navigation on inland waterways be determined with proper agreements; thus, it will be possible to establish conditions of navigation, loading and unloading of ships, and to establish conditions of accounting and other questions contributing to a successful realization of transports."

As a result of the resolutions of the Moscow Conference, the USSR barges started trial runs in July 1957 and were continued to the end of the navigational season in 1957; trial runs were continued during the entire navigational period of 1958.

In 1957, 2,900 tons were transported, and in 1958, 23,000 tons were transported. After conducting the first trial runs in July 1957, a protocol was drawn up and signed by representatives of East Germany, the USSR, and Poland. The protocol states that:

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1. The technical status of the waterway on the Kaliningrad-Magdeburg route makes exploitation possible even in 1977, using the permissible barge draft.

2. To introduce permanent transportation on the mentioned route, the average depth of the waterway in 1977 be maintained at 1.3 meters.

The problem of transit via inland waterways does not end with the above-mentioned documents.

Endeavoring to conclude the talks on this subject, the delegation of the USSR raised the matter of activating transports at the first session of the Permanent Group on Transportation Matters of COMECON, which was held in August 1977. The protocol of the above-mentioned session (signed by the Polish delegation) states in point IX/2 that "after hearing the detailed information of the delegation of the USSR on the transportation of export and import freight, and on the trial run of the freight barges via inland waterways from Kaliningrad to Magdeburg, the Working Group considers it advisable to call the attention of interested countries to the importance of the development of these transports on the Kaliningrad-Magdeburg sector (with the possibility of extending transports of shipments to Czechoslovakia), as well as to the necessity of studying the facilities for a further development of these transports."

The problem of activating transports on this route was again raised by the delegations of the USSR and of East Germany at the second session of the Permanent Working Group on Transportation Matters

of CEMA held 20-29 January 1958.

At this session the Polish delegation proposed that this matter be transferred to trilateral talks. The proposition was accepted.

After this, the Soviet group approached Poland three times about starting trilateral talks for the purpose of signing an agreement on inland waterways transit.

The final point of view of the Polish group on the entire problem was presented to the Soviets in a note dated 24 October 1958, in which it was proposed that inland waterways transit be reviewed in unison with the transit problem of all modes of transportation.

In accord with the opinion expressed in the note, the Polish delegation considers as fully justifiable the need of assurance by the USSR and East Germany of maximum utilization of the transloading and transshipment capabilities of the Polish State Railroads for amortization of investments made by Poland for the needs of transit.

As heretofore mentioned, the USSR transported about 26,000 tons on the Kaliningrad-Magdeburg route. Even though these shipments were quantitatively small, they did give the Soviets the opportunity of learning the condition of this route and its navigability.

Without any investment outlays or additional maintenance costs, the present technical status of the Frisches Haff-Odra River waterway allows the transportation of about 600,000 tons per year, with permissible speed of barges on Frisches Haff of 17 kilometers per hour; on the Bydgoszcz Canal of 7 kilometers per hour; on the Noteć River of 4.5 kilometers per hour; (with a tonnage draft of 1.20 meters;

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under average water conditions for 110 days a year; under daytime navigation; about 16 hours per day.)

In case 24-hour navigation be introduced, the outlays for the maintenance of waterway would increase by about 2,250,000 zloty per year; however, about one million tons could be shipped per year. It must be pointed out that internal shipments on this route are small, amounting up to about 100,000 tons per year.

Under such conditions, the technical capability of transit cargo shipments via inland waterway is uncontestable.

At the recent conference of transportation experts of the countries of COMECON, held in Moscow in January of this year, the German delegation presented a preliminary proposition for transportation of 125,000 tons (100,000 tons east-west, and 15,000 tons west-east) of commodities in 1965 on this route; moreover, this delegation asked Poland's attitude on the possibility of increasing these shipments by an additional 200,000-300,000 tons in 1965.

The handling of these shipments would be expedient, if it did not reduce railroad transit to a level below the cargo handling capacity of the railroad. However, the fact must be considered that the activation of transit shipments via inland waterways will cause a drop in railroad transit (accompanied by non-usage of carrying capacity of the railroad) which will, in turn, cause a drop in the influx of foreign exchange.

At the same time, the fact must be considered that each country desires to transport its cargo by the cheapest transportation means, and the fact that shipments could decline if an inland waterway is not opened to a maritime route.

Information on hand shows that the USSR-East Germany railroad transit will be 9.1 million tons in 1959, and 9.4 million tons in 1965, ^{or} practically no increase. Transit via maritime routes will be one million tons in 1959 and 6 million tons in 1965.

The transportation of this quantity of cargo via maritime routes is entirely possible, considering the expansion of the maritime fleets of the USSR and of East Germany, as well as the development of the port of Rostok, which in 1965 will attain a transloading capacity of about 6 million tons.

A calculation of foreign exchange losses for Poland resulting from a possible transfer of commodities from railroads to inland water ways, or maritime transit, is shown in enclosure No 1.

According to the calculation, a transfer of one million tons to maritime transit would bring Poland a loss of 19.7 million rubles, because this quantity could be transported by inland waterways, with Poland's inland fleet participating 33 percent.

According to available information, the USSR proposed a continuation of trial runs in 1959, and intends to transport about 300,000 tons via inland waterways.

Because of reasons mentioned above, this problem requires a definitive solution.

SECRET**Enclosure No 1**

Calculation of the foreign exchange losses to Poland resulting from a transfer of transit commodities from railroads to waterways

1. Estimated quantities of commodities to be transported during a year:

<u>Inland Navigation</u>	<u>East-West (1,000 tons)</u>	<u>West-East (1,000 tons)</u>	<u>Total (1,000 tons)</u>
Alternative 1	110	90	200
2	170	130	300
3	300	200	500
4	700	300	1,000
<u>Railroad transportation in 1971</u>	7,767	573	8,240

2. Transportation distances:

Railroad shipments	604 kilometers	668 kilometers
Inland navigation	854 kilometers	854 kilometers

3. Transportation rates:

Railroad shipments	26.00 rubles/ton	46.80 rubles/ton
Inland navigation	32.50 rubles/ton	60.00 rubles/ton

4. Charges for transloading at border railroad station -- 6.85 rubles/ton.

5. Lock fee is 3.90 rubles per ton of carrying capacity of barge, and the coefficient of utilizing the carrying capacity is 53 percent.

Table 1. (Continued)

Transfer of transit from railroad transportation to inland waterways

200,000 tons		300,000 tons		500,000 tons		1,000,000 tons	
100%	33%	100%	33%	100%	33%	100%	33%
Foreign Stock	Polish Stock	Foreign Stock	Polish Stock	Foreign Stock	Polish Stock	Foreign Stock	Polish Stock

(in 1,000 rubles)

Railroad losses:

For transportation	- 7,072	- 7,072	- 10,504	- 10,504	- 17,160	- 17,160	- 32,240	- 32,240
For transloading	- 753	- 753	- 1,164	- 1,164	- 2,055	- 2,055	- 4,795	- 4,795

Income from navigation:

For lock charges	+ 1,453	+ 969	+ 2,245	+ 1,497	+ 3,962	+ 2,641	+ 9,245	+ 6,165
For transportation via Polish Stock		+ 2,929		+ 4,442		+ 7,250		+ 13,583

1. Foreign exchange attained by Poland in shipping part of the transports via inland waterways	- 6,372	3,864	- 9,423	- 5,729	15,253	- 9,324	- 27,790	- 17,289
2. Foreign exchange attained by Poland if part of the cargo is sent by sea	- 7,823	- 7,823	- 11,668	- 11,668	- 19,215	- 19,215	- 37,035	- 37,035
3. Losses that will result if the inland waterway is not opened	+ 1,453	+ 3,861	+ 2,245	+ 1,497	+ 3,962	+ 2,641	+ 9,245	+ 6,165

Notes: The above foreign exchange losses may occur if the transportation facilities of the Polish state railroads is not fully utilized on the East-West transit lines.

Progress of the sixth session of the Commission for
Economic and Scientific-Technical Cooperation of CEMA
on electric power engineering

Anatol Kopystanski, Master of Engineering

1. Exchange of electric power between countries participating in
CEMA.

In accordance with the recommendation of the ninth session of CEMA,
the Electric Power Commission of CEMA developed a proposition covering
increased exchange of electric power, and the ^{integration} ~~integration~~ of electric power
systems of countries participating in CEMA in the period up to 1965.

At the sixth meeting of the Electric Power Commission, held in Mos-
cow from 5-12 March 1959, a memorandum was drawn up, and together with a
proposed resolution, will be presented to the Council at the eleventh
session of CEMA.

The ~~goals~~ ^{aim} of the above proposals ~~are~~ ^{are} to form a common electric power
system for countries participating in CEMA, to standardize the countries
systems and to produce common benefits, which would be achieved through
the following:

a. A reduction of outlays for construction of electric power
plants through the elimination of reserve units, and ^{through a reduction} ~~elimination~~ of peak
overloading in integrated system because of the equalization of time
differences in peak occurrences in the countries.

b. A reduction of losses in transmission of electric power
because of the possibility of feeding areas with power shortages ~~and~~

from nearby electric power sources of a neighboring country's system.

c. A reduction in consumption of fuel in electric power plants because of more rational division of loads in ^{integrated} ~~single~~ system.

The above tasks can only be fully achieved after the electric power systems of the countries of CECA are integrated; this will occur in 1965. In the period up to 1965 only the first steps toward the goal will be made; nevertheless, even these steps will bring certain benefits.

The realization of the goals mentioned in the memorandum of the Electric Power Commission of CECA can be divided into two stages.

In the first stage, covering the period 1962-1963, the exchange of electric power between Poland, Czechoslovakia, and East Germany will be increased. Also electric power transit from East Germany to Hungary through Polish network will be increased. The domestic systems of ^D Poland, ^A Czechoslovakia, and East Germany will not as yet be integrated at this time for parallel operation; turbogenerator aggregates supplying electric power to a neighboring country will be separated from the rest of the system, and will feed power into the receiving system of the country. The enclosed sketch No 1 shows the exchange of power. The purpose of this exchange is to reduce transmission losses of electric power to the following power-deficient areas:

a. In Poland, to the Dąbry Śląsk area from Górný Śląsk, until such time ^{or} as an electric power plant is built in Turów.

b. In Czechoslovakia, to Moravská Ostrava from the northwestern electric power plants.

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c. In East Germany, to Zwenitz, near Dresden, from the Borsdorf Electric Power Plant (near Turów).

d. Transit from East Germany to Hungary will be conducted in the following manner: the power supplied by East Germany will be used in Poland in the Dolny Slask area in exchange for electric power supplied by Gorny Slask through Czechoslovakia to Hungary.

The above "round about" exchange of electric power will also permit a savings, or ^{or} postponement to later years, in network investments necessary to supply power-deficient areas from a country's own source of electric power.

This exchange will begin partly in the fourth quarter of 1959. Czechoslovakia will supply the area of Walbrzych (Poland) with 50 megawatts, and Poland will return this quantity of power to Czechoslovakia from the ^{the} Skawina Electric Power Plant, through the 220-kilovolt Skawina-Jaworzno-Liszkowice line now under construction.

Exchange on a full scale mentioned above, and the power transit to Hungary will start in the fourth quarter of 1960.

The termination of this exchange is expected at the end of 1963. The start of the operation of the first turbine generators in the Turów Electric Power Plant is basically changing the situation in the Polish system.

The Turów Electric Power Plant will fully cover the power shortages in Dolny Slask, and will export electric power to other parts of Poland.

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Hence, the supply of electric power from East Germany would not be used in Poland in the border area, but would have to be transmitted through networks to Gory Slask for transmittal to Czechoslovakia.

In the memorandum a supply of electric power from the USSR to Poland for the area of Olstyn (about 20 megawatts) was also noted. However, this supply has a local meaning and does not have an influence on the expansion of the integration of the systems.

In the second stage, covering the period 1963-1965, the plan calls for implementation of the above-mentioned power transit to Hungary. During this time, small exchange between East Germany and Czechoslovakia will be made through the 220-kilovolt Turaw-Turnow (Czechoslovakia) to the Czechoslovakia network (sketch No 2).

[Note: next 3 paragraphs are illegible]

Obligations of Poland

The realization of the goals mentioned in the memorandum of the Electric Power Commission places upon Poland the obligation of putting into operation, as per schedule, of the following network investments. Only part of these investments are to serve directly in the exchange of electric power with other countries; others must be fulfilled independently of any cooperation of systems. These investments are connected with the construction of the Turaw Electric Power Plant. However, co-operation of the systems requires that fulfillment of the investments be accelerated by about 2 years.

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Among the first investments are:

- a. The construction of the 220 kilovolt Jastrava-Lishovec (Czechoslovakia) line, 74 kilometers long, scheduled date for operation 30 September 1959, cost 27 million slovy. Construction has been started.
- b. The installation of a second trunk on the aerial line in the period 1962-1963, costing about 10 million slovy. Activation date for this project is still to be decided.
- c. The construction of the 220-kilovolt Turav-Turnov (Czechoslovakia) line, length about 10 kilometers to the border of Czechoslovakia, cost about 7 million slovy which includes distributing apparatus. The planned completion date for this project is 1963.

The investments requiring acceleration by about 2 years are:

- a. The construction of the 220-kilovolt Turav-Beraderf line, cost about 8 million slovy. Activation date is scheduled for 30 June 1960; investment plan envisages the fulfillment of this project in 1959.
- b. The partial construction of a distributing station for the 220-kilovolt/110-kilovolt Turav Electric Power Plant in Mihalova, including the assembly of a transformer of 160 MVA, 220-110 kilovolts, cost about 25 million slovy, scheduled date for start of operations 30 June 1960. The start of this project is planned for 1959.

Benefits

The realization of the first stage of cooperation permits a reduction of outlays for network construction during the period 1959-1960 by about 25 million slovy, and a reduction in consumption during the same period of steel-aluminum cables by about 350 tons. It may be possible to postpone

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the construction date for the Gorny Slask - Dolny Slask line.

The acceleration of the construction of the distributing station in Mikulowa will not additionally encumber the investment plan for 1959-1960, because similar transformer station would be necessary in another site if Gorny Slask were to supply power to Dolny Slask.

In the first stage of electric power cooperation, Poland will make a *saving* of about 30-40 million kilowatt hours per year on transmission losses in the period 1961-1963.

In the second stage of cooperation (parallel operation of the systems) in the period 1964-1965, the above-mentioned savings in electric power of about 200 megawatts is valued at 700 million zloty (this is equivalent to the value of a reserve electric power plant).

Compared with the cost of lines connecting the Polish system with neighboring systems, and with the costs of integrating apparatuses for these lines, amounting to a total of about 62 million zloty, the economic effectiveness of electric power cooperation is obvious.

Controversial Problems

In discussing the project mentioned in the memorandum ~~the~~
~~at meetings of the Electric~~
Power Commission, there were ~~disagreements~~ dif-
ferences of opinion between the Polish delegation and the East German, Czechoslovak, and Hungarian delegations on the following matters.

a. On the suggestion of the Polish delegation, September 1960 was established as the date for the start of trilateral exchanges

between Poland, Czechoslovakia, and East Germany. The East German Delegation wanted the date set for the fourth quarter of 1959, offering Poland a loan of 220/110 kilovolt transformers to accelerate the exchange of electric power. The East German delegation maintained that the necessary investments for the exchange of electric power will be completed during the current year; hence, they could be used starting in the fourth quarter of 1959.

The Polish delegation defended its position by pointing out the actual situation in Polish electric power system, particularly pointing out the impossibility of proposed power consumption in Dolny Slask at the end of 1959 and at the beginning of 1960.

b. Because of the opposition of the Polish delegation to a proposed resolution of the Council, the recommendation was not included for a revision by Poland of the delivery to Hungary of 15 megawatts of power in the period 1964-1965 as partial coverage of a shortage resulting from reduced supply from Czechoslovakia.

The Polish delegation defended its position with the lack of knowledge of the power balance in those years because of the changes made in the five-year plan.

The position of the Polish delegation was not easy to defend because of the insignificance of the requested supply by Poland's electric power balance (about 0.2 percent of the peak load in the year 1964/1965) and because of proposed supply of power from the USSR to the area of Gdansk

in Poland, equivalent in quantity to the ^{agreed} ~~agreed~~ requirements to Hungary.

c. Because of the opposition of the Polish delegation, neither in the memorandum nor in the proposed decision ^{was a} ~~was a~~ recommendation forwarded on the undertaking of bilateral talks between Poland and Czechoslovakia on joint construction of an electric power plant in Poland, which would export electric power to Czechoslovakia after 1965. Such a recommendation was eagerly supported by the Secretariat of the Commission, and was also supported by the delegations of Czechoslovakia, the USSR, and Hungary. The Polish delegation defended its position stating that a formal approval was required, and that the memorandum covered the period up to 1965, whereas the above recommendation covers a time period beyond 1965. The Polish delegation, then, defended itself with the lack of preparation of this matter.

2. Establishment of prices for electric power exchanges between countries of CEMA

At the 11th session of the Council, the chairman of the Electric Power Commission will present the difference that occurred at a recent meeting of the Commission in the position of Rumania on the one hand, and the position of the six remaining countries on the other hand on the establishment of ^{method} ~~uniform~~ for designating prices for electric power exchanged between countries of CEMA.

A method was finally developed by working groups of the Commission and presented for approval to the Commission. Representatives of all countries of CEMA, including Rumania, participated in the work of these working groups.

At the meeting of the Commission, the Romanian delegation questioned the very principle of a uniform method of establishing prices. It suggested the theory that prices for electric power should be established by the interested countries. Also, the studies of the working groups should be limited to the collection of information on calculation methods applied in international exchange.

The Romanian delegation also refused to participate in the discussion on the development of a working group.

Delegations of the remaining 6 countries assumed the attitude that it is necessary to accept a uniform method for designating prices for electric power, particularly under conditions of parallel operation of several domestic systems. The final destination and quantities of electric power will be changed many times, and it will be difficult to define them strictly.

Because the differences of opinion could not be resolved, the meeting was entered in the protocol, and the chairman of the Commission was authorized to present the matter for solution at a meeting of the representatives of countries, participants of CEMA.

In an unofficial discussion on the development of a working group conducted without Romania's participation, the Polish delegation requested the acceptance of the principle of not only a uniform method for designating prices, but also the acceptance of uniform price indexes in case of parallel operation of several systems. This position was supported by other delegations.

It must be remembered that under conditions of parallel operation of systems electric power transmission should be based only on optimum operating conditions of the integrated system, and that any differences in prices for electric power exchanges between participants of electric power cooperation would have an unfavorable influence on the exchange of power.

The principle of uniform indices for electric power prices is most justified under these conditions.

The Polish delegation also requested the expansion of the functions of the working group in the establishment of electric power prices.

At the 11th session of the Council efforts should be made to change Rumania's attitude on the above mentioned matter, so that the remaining six participants in CEMA could come to an understanding. Rumania should be left the possibility of joining in the future.

[Translation of the map legend on page 18 of original document follows:]

- A. Supply from East Germany to Poland on the basis of coal pact - 60 megawatts.
- B. Trilateral exchange--East Germany - Poland - Czechoslovakia
- C. Transit from East Germany to Hungary - 50 megawatts
- D. Bilateral exchange, Czechoslovakia - Poland - 50 megawatts

4. Efforts of CEMA and bilateral cooperation Polish-

Czechoslovakia to cover requirements for chemical apparatus

Os. Lachecki, Master of Engineering

The rate of expansion of chemical industries in the socialist countries in the period 1961-1965 will be higher than it has been up to now, and higher than that of the entire industry. In Poland in 1965, the production of the chemical industry will be double the 1960 production, whereas the production of industry as a whole during this period will increase one and one-half times.

On the whole, the production of machines and equipment necessary for this expansion is not keeping pace with this rapid expansion of the chemical industry. Hence, it was necessary to balance the needs and the production of equipment, within the framework of countries belonging to CEMA, to establish the expected shortages and to find a remedy for this situation. The development and presentation of these balances was entrusted to working groups of specialists of these countries within the framework of the Machine Commission and the Chemical Commission of CEMA. The development of balances was started in September 1958 at a meeting of the working group in Dresden; it was later continued at a meeting of the working groups in Berlin in October 1958, and in Dresden in February 1959. It was also continued within the framework of planners' meetings of individual branches of the chemical industry.

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The development of balances encountered a few difficulties. For the production of some kinds of chemicals there is still a lack of plans. Hence a knowledge of the needs for equipment is inadequate. The present balance sheet of production and requirements for chemical equipment in respective countries is based on varied nomenclature and is frequently of a general nature, as for example in Poland, without a proper breakdown into particular groups of equipment. At the time the balances were developed, the guiding principles for development for the period 1961-1965 were not as yet established. The organization and the management of the working groups that met in East Germany, a country leading in the production of chemicals and in the construction of chemical apparatus within the framework of CEMA, and ~~not~~ meet expectations.

The functions of the groups were not made easier by the delayed arrival of guiding principles for the preparation of the studies, by poorly developed guiding principles, and by the formal approach to these guiding principles.

Orientating requirements were developed, and then these requirements were broken-down into various assortments necessary to fully equip a chemical industry.

In the balance sheet of requirements, production, imports and exports the Machine Commission of CEMA included chemical apparatus, pumps, and compressors, a total of 18 groups out of 27 that cover all equipment, in accord with nomenclature developed for purposes of specialization

which is not always suitable for purposes of drawing up balances. (For example, the uncoded category "special apparatus" covers about 20 percent of the total requirements.) Equipment, included in the balance account for about 40 percent of the total equipment of a chemical industry (for example, in Poland 305,000 tons of a total of 520,000 tons of machines and equipment, and 825,000 tons of total equipment including pipes, structurals, etc.)

In spite of the fact that the real purpose of the balance was to investigate the possibilities of covering the needs of chemical industry, the Machine Commission included chemical apparatus for all branches of national economy in the balance sheet, with some countries developing the balance data in various ways (for example, the USSR did not include chemical apparatus for processing of crude oil, and Czechoslovakia, for the food industry.)

Balance data on chemical apparatus for the period 1961-1965 are as follows:

	<u>All countries of CEMA</u>		<u>Poland</u>	
	<u>1,000 tons</u>	<u>1965 over 1959 (\$)</u>	<u>1,000 tons</u>	<u>1965 over 1959 (\$)</u>
Requirements for entire national economy	5,195	220	418	200
Of which: for the chemical industry	3,180	240	305	200
Production	5,123	225	385	174
Export	1,070	300	66	130
Of which: to countries of CEMA	690	330	58	200

Studies of the working groups confirmed the possibility of imports of equipment from countries of CEMA to Poland. The following table shows the planned imports of equipment into Poland in the period 1959-1965:

	<u>Chemical Apparatus (1,000 tons)</u>	<u>Pumps (1,000 tons)</u>	<u>Compressors (1,000 tons)</u>
From Hungary	16	1.3	1.1
From East Germany	24	5.1	18.
From the USSR	3	0.3	0.3
From Czechoslovakia	4	5.3	1.6

In exchange, Poland would supply East Germany with about 7,000 tons of storage tanks. Deliveries from the USSR and East Germany may be increased, in exchange for other deliveries from Poland.

After correcting the differences in the balance sheet, and taking into consideration the import possibilities from countries of CEMA, shortages in chemical apparatuses for the period 1959-1965 will be as follows:

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>Total</u>
All countries of CEMA, 1,000 tons	49	99	97	75	69	58	51	494
In percent of requirements (%)	10	17	14	10	8	6	5	10
Poland, 1,000 tons	3	4	7	11	11	8	7	51
In percent of requirements (%)	4	10	13	16	15	11	10	12

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Shortages in Poland occur mainly in the following types of apparatuses: column apparatuses (for refineries), apparatuses for decomposition of gases, and special apparatuses.

Part of this shortage, particularly equipment not produced thus far in countries of CEMA, will be covered with imports from capitalist countries.

Ways proposed by the Section for Construction of Heavy Machines of the Machine Commission to cover remaining shortages are not adequate.

These ways are limited to specialization, exchange deliveries, improved utilization of existing plants, and possible, though not feasible, development of the production of apparatuses in Bulgaria. Attention has not been sufficiently devoted to possible cooperation between countries to make designing sketches on hand more accessible.

Suggestions on specialization are developed as if specialization was the goal, and not a means to cover the shortages. Tonnage-wise, specialization includes about 15-20 percent of the chemical apparatus, a full coverage of needs in specialized apparatus cannot be expected in a period of great shortages, that is, in the period 1961-1962. Generally, specialization is often treated as a privilege, and the fulfillment of the tasks to cover the needs of all countries of CEMA is avoided. To conduct specialization, it is necessary to fill out very detailed forms, in spite of the fact that all countries cannot see the possibility of fulfilling this in a short time.

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There is some apprehension, however, that production of certain types of pumps and compressions will not be sufficient (for example, large high-pressure compressors, turbocompressors, and acid-resistant pumps). In the present stage, specialization of pumps and compressors has not been considered, in spite of the fact that a few types of these machines, from the viewpoint of the chemical industry, require specialization.

Here, it must be emphasized that Polish industry's participation in specialization of apparatus is very small, since production includes mainly simple equipment.

Poland's shortages occur in chemical apparatus for the chemical industry; the needs of other branches of industry can be covered by domestic production. Considering imports from capitalist countries of about 20,000 tons, and from CEMA countries of about 48,000 tons, there still remains a shortage of over 30,000 tons in chemical apparatus for the period 1959-1965.

Imports of chemical apparatus to Poland is about 24 percent of the requirements, which means a shortage can be covered only by a much greater than ^{the} planned production of apparatuses. The following table shows the planned production of chemical apparatus of CEMA countries in 1959-1965.

<u>Country</u>	<u>Production</u> (1,000 tons/ year) 1965		<u>Production</u> Increase, in percent 1965/1959
	<u>1959</u>	<u>1965</u>	
Poland	39	68	176
East Germany	94	187	199
USSR	205	460	225
Czechoslovakia	56	184	329

To alleviate this shortage, the Polish delegation proposed, and opposed by other countries, specialization in planning, designing, and construction of complete chemical plants, as well as cooperation in construction of equipment for these plants.

A bilateral pact between Poland and Czechoslovakia is the beginning of the implementation of this proposition. In November 1958, a Polish-Czechoslovak working group reviewed the goals for the expansion of the chemical industries, covering 45 chemical plants, of both countries. This group agreed that for 26 of these chemical plants, the cooperation of both countries is desirable in designing, standardization, development, and equipment deliveries.

To conduct this cooperation, meetings of specialists of both countries in the following 7 chemical production fields took place: sulfuric acid, phosphorus fertilizers, nitrogen fertilizers, caprolactam, phenol, crude oil refining, petrochemicals, and sugar. Further meetings of specialists will take place as required for discussion of technological bases for planning of other production.

Groups of specialists developed recommendations on the utilization of projects on hand, the division of new projects between both countries

for implementation, the mutual deliveries of equipment for recommended plants, and the exchange of technical information.

[Next paragraph is illegible.]

On deliveries, there is a great difference in delivery capabilities and requirements of both countries.

Recommendations of the specialists establish equipment requirements for the period 1961-1965 as follows: From Czechoslovakia to Poland, 41,000 tons of equipment; from Poland to Czechoslovakia, 10,000 tons of equipment.

Because of the lack of free production surpluses in both countries, the principle was accepted of equalizing mutual equipment deliveries for the chemical industries of both countries; the delivery assortments may be various, however, mutual deliveries of apparatus made from acid-resistant steel must be balanced.

Because of this, it was necessary to again check the division of deliveries of equipment for the production of nitrogen fertilizers, for refining, and for the production of petrochemicals, from the viewpoint of reducing deliveries from Czechoslovakia, and increasing deliveries from Poland. Hence, the principle was accepted that certain equipment should be made for both countries in Poland, and others, in Czechoslovakia. Blueprints for construction of equipment would then be mutually utilized.

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The possibility of cooperation in the production of some kind of machines, for example, large compressors, was also approved.

In terms of value, mutual deliveries, estimated initially at about 40 million rubles for each country during the period 1961-1965, will increase most likely 3-4 times, which will account for about 15 percent of total [value?] imports of equipment for the Polish chemical industry.

The designing bureaus and individual plants will also cooperate in the exchange of mutual technical information pertaining to research work on a pilot plant scale. It is expected that there will be a mutual exchange of intermediates for the production of caprolactam for comparison of quality.

The delegations of both countries had the opportunity to become acquainted with the chemical factories and with the chemical apparatus factories of both countries.

Czech apparatus factories such as the Brno-Kralove Pole, and the Hradec Kralove greatly outstrip similar Polish factories. These factories are large (for example the Kralove Pole produces more apparatuses than all apparatus factories in the engineering industry in Poland), well equipped, and have large designing bureaus (ratio of engineering-technical employees to workers is 1:2.2.) The designing bureaus of the chemical industry develop only the initial plans; the apparatuses factories develop the blueprints, sketches, etc., and also carry out the function of a general supplier of complete plants. At present,

these factories are being greatly expanded; moreover the production assortments are being changed to increase supplies for the chemical industry.

In summarizing, the Polish-Czechoslovak cooperation on planning, designing, and mutual deliveries of equipment can be evaluated favorably. Talks are conducted with sincerity, materials are fully accessible, and an atmosphere of understanding prevails. The full effect of this cooperation will be achieved through a rapid increase in the production of ^{apparatus} ~~equipment~~ in Poland, which will enable greater exchange deliveries.

5. Supplying the Polish aluminum industry with
aluminum oxide through exchange with Hungary

Aluminum is now in first place among the nonferrous metals.

The following table shows the world production of aluminum in selected years:

<u>Year</u>	<u>Production (tons)</u>	<u>Index of increase</u>
1900	5,800	1.0
1910	44,950	7.5
1920	125,050	2.8
1930	269,200	2.8
1940	887,200	3.0
1950	1,506,800	1.85
1956	3,400,000	2.25

The range of uses of aluminum is very broad. This is due to the properties of aluminum and its alloys, such as good mechanical strength, low specific weight, good resistance to corrosion, and high electric conductivity. The chief consumers of aluminum are the transportation industry (aviation, ships, railroad rolling stock, and automotive equipment), the machine-building industry, the electrical industry, the packaging industry, and the construction industry, which has increased tremendously in recent times.

The following table shows Poland's requirements for aluminum and its consumption for selected years:

	<u>1953</u>	<u>1955</u>	<u>1960</u> <u>(Plan)</u>	<u>1965</u> <u>(Plan)</u>	<u>1970</u> <u>(Plan)</u>	<u>1975</u> <u>(Plan)</u>
Requirements, in tons	10,351	19,485	33,450	90,000	112,000	156,000
Consumption per capita, in kg.	0.48	0.7	1.1	--	--	4.1

For comparison purposes, the following aluminum consumption per capita is given for industrial countries in 1956 (in kilograms):

England, 5.5; Austria, 5.1; France, 3.1; Germany, 2.4; Italy, 1.5; Norway, 4.2; Sweden, 3.9; Switzerland, 6.0; the USSR, 2.2; Canada, 5.2; USA, 9.6; and Japan, 0.73.

The profitability of aluminum production in Poland is shown by the following table (calculated in dollars per ton of metallurgical metal in pigs, under present production conditions.)

<u>Commodity</u>	<u>Costs</u> <u>(at world prices)</u>
Aluminum oxide	201.31 dollars
Aluminum sheet	1.79 dollars
Cryolite	10.26 dollars
Aluminum fluoride	9.29 dollars
Technological electric power	108.00 dollars
Carbon products	<u>37.83 dollars</u>
	368.58 dollars

Costs, (labor, total costs,
amortisation, and similar costs)

2,908.95 sloty

Price of aluminum

500.00 dollars

Dollar costs

368.58 dollars

131.42 dollare

Foreign exchange effectiveness

$$\left(\frac{2,908.95}{368.58} = 21.1 \text{ sloty/dollars} \right)$$

131.45

As is known, the production of metallic aluminum is divided into two basic production stages. In the first stage, aluminum^{oxide} is obtained chiefly from bauxite through chemical methods or, in particular cases, from other aluminum-bearing raw materials. The next stage consists in electrolysis of oxide in solutions of melted cryolite. Because of the fact that about 2.5 tons of bauxite is consumed for the production of one ton of aluminum oxide, aluminum oxide plants are, in principle, located near deposits of this raw material. And because the electrolytic process consumes immense quantities of electric power (about 18,000 kilowatt hours per ton of aluminum), aluminum metallurgical plants are located near cheap sources of electric power, which accounts for 20-25 percent of the total real costs of production of this metal.

The technical progress made recently permits an even greater reduction in the costs of aluminum production. A few examples of this progress are:

a. In the production of aluminum oxide from high-grade bauxite by the Bayer method, it was possible to reduce steam consumption from

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8-10 tons per ton of aluminum oxide to 4 tons, at present (this corresponds to a consumption of 550-580 kilograms of 6,000-calorie coal).

b. In electrolysis of aluminum, vats are now used with vertical current conductivity and with very great capacity (France 100,000 amperes; the USSR, 130,000 amperes,) instead, as up to now, vats with side current conductivity, and with capacity, for example in Poland, of 58,000 amperes (according to plan, only the amperage was, 45,000; the increased capacity was achieved during process intensification.) These new types of vats reduce the costs of labor, and reduce amortization quotas by lowering investment costs, calculated into tons of production.

c. The use of semiconductor-current rectifiers reduces ~~the~~ consumption by 4-5 percent.

The following table shows the ^{planned} aluminum production in member countries of CEMA in 1960 and 1965.

	<u>Poland</u>		<u>Hungary</u>		<u>Czecho-slovakia</u>		<u>East Germany</u>	
	<u>1960</u>	<u>1965</u>	<u>1960</u>	<u>1965</u>	<u>1960</u>	<u>1965</u>	<u>1960</u>	<u>1965</u>
Production of metallurgical aluminum (excluding scrap), in 1,000 tons	23	75	47	50	55	59	35	55
Production of Al_2O_3 , in 1,000 tons	13	52	200	230	104	110	58	60

Of the member countries of CEMA, only Hungary has bauxite deposits for the production of aluminum oxide. Rumania has certain quantities of bauxite, but kinds not suitable for processing into ~~the~~ oxide by the most economical method, the Bayer method.

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Poland's domestic production of aluminum oxide will include 3,000-12,000 tons produced by the cement industry, and 35,000-45,000 tons after the plant in Gorka is activated which will use bauxite imported from Hungary. There is also the possibility of producing oxide by smelting in pit furnaces about 40,000 tons of bauxite. This would require the import of "non-Bayer" type of Rumanian bauxite, or of Yugoslavian bauxite. Research is also conducted ~~the~~ the possibility of obtaining oxide by the acid method. However, it will take at least 2 years to determine whether or not this method can possibly be used.

The construction in Poland of a large aluminum oxide plant, using the Bayer method (the most economical method), seems inadvisable because it would be necessary to import large quantities of the proper kind of bauxite from countries other than the member countries of CEDMA (Hungary is reserving its deposits of Bayer bauxite exclusively for its own production of oxide.) The construction of a large plant, based on the method of sintering inferior kinds of bauxite (as for example Gorka) is not justifiable because of the inferior quality of the oxide obtained (oxide obtained contains no less than 0.15 percent of SiO_2 , which disqualifies the metal for electrical uses.)

On the other hand, the construction of a large aluminum oxide plant parallel with a large aluminum metallurgical plant would cause a very great increase in investment effort without any assurance that aluminum production would increase. Instead of importing aluminum oxide, it would be necessary to import bauxite.

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Because of the above-mentioned reasons, propositions for solving this problem tend toward cooperation with Hungary by expanding aluminum production in Poland and aluminum oxide production in Hungary, and an exchange of these products, the basis of world prices, which is equivalent to one ton of aluminum for about 5.5 tons of aluminum oxide. Thus, for about 11,000 tons of oxide per year, Poland will have to expand the planned aluminum production by about 20,000 tons per year. It must be emphasized here that this solution to the problem will not require any new basic investments either in Hungary or in Poland. In Hungary these quantities of oxide can be obtained through proper reconstruction of existing plants, and in Poland, the additional aluminum production can be obtained through the use of vats with 130,000 amperes rather than the planned vats of 100,000 amperes, modelled on in new aluminum plant now in use in Stalingrad. Hence, instead of the planned 70,000-80,000 tons of aluminum per year, the Komin aluminum plant will be able to produce 90,000-100,000 tons of metal per year. A further increase of this cooperation would require construction of a new oxide plant in Hungary, and new series of electrolysis in Poland.

Also, it must be remembered that exports of aluminum in exchange for imports of aluminum oxide is tantamount to exports of coal, because electric power, produced from coal and coal products, accounts for at least 30 percent of the total aluminum production costs, and amounts for almost 50 percent of all costs, excluding aluminum oxide.

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The proposed exchange cooperation is an example of a favorable division of production, in accord with the specialization and capabilities of both countries. Some of the advantages of this proposition are:

a. The exchange of quantities up to 100,000 tons of oxide and 20,000 tons of aluminum per year can be achieved without any basic or costly investments.

b. An improvement in the economy of production in both countries. In Hungary, a great improvement in production indexes will be obtained through reconstruction of the plant, and in Poland, the profitability of metallurgical plant will be improved through greater usage of the production units.

c. Through imports of aluminum oxide, Poland will reduce the volume of transports -- in one direction, one ton of aluminum oxide will be shipped instead of 2.5-3 tons of bauxite; and in other directions, one ton of aluminum instead of 7.5 tons of coal, or 18,000 kilowatt hours of electric power (transmission zones).

d. Both countries are ^{and} assured of long-term supply of basic raw materials.

In the period from 23 February to 4 March 1959, the Sub-Commission for Polish-Hungarian Cooperation in Metallurgy and Nonferrous Metals met and passed the following propositions:

a. In addition to the normal deliveries on clearing accounts, which should be about 50,000 tons per year in the period up to 1965.

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Poland will expect the following additional quantities of aluminum oxide from Hungary: in 1965, 30,000-65,000 tons; in 1966, 60,000-110,000 tons; in 1970, 74,000-130,000 tons; and in 1975, 110,000-210,000 tons.

Poland stated that it is ready to cover these deliveries with mutual deliveries of coal and metallurgical aluminum, ~~which~~ ^{being} in principle, the value ratio of coal to aluminum of ^{///} 2:1. Accounting should be made on the basis of world prices.

b. Hungary agrees, in principle, on the conclusion of this type of exchange agreement, but only on the condition of the exchange of aluminum oxide for metallurgical aluminum at world prices; it does not agree to an exchange of these quantities of oxide for even a partial delivery of coal.

An exchange of aluminum oxide for Polish coal is not in this case the basic question. This kind of a proposition would not result in a new market for coal, because Poland is the only coal exporter to Hungary and covers all coal requirements of this country.

Poland is desirous of increasing the quantities of aluminum oxide from Hungary on clearing accounts, in addition to the planned 50,000 tons per year.

The present Polish investment plan, envisaging the expansion of the Skawina Metallurgical Plant, and the construction of two series of electrolysis in Konin (a total of about 150,000 tons per year), will permit Poland to export about 20,000 tons of aluminum per year after 1967.

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The maintenance of the Hungarian plan -- aluminum oxide in exchange only for aluminum -- would mean that a full coverage would be impossible of the Polish requirements for aluminum oxide with imports from Hungary.

By 1973, Poland would have to obtain 100,000 tons of aluminum oxide from other sources, for example, by imports from third countries for other commodities (besides aluminum.)

6. Information on cooperation with Yugoslavia

In the first two months of this year there was a revival of cooperation with Yugoslavia. During this time, the successive session of the Commission for Scientific and Technical Cooperation, and a number of meetings of delegations of both countries took place as a result of the implementation of the resolutions of the Polish-Yugoslav Committee for Economic Cooperation.

Scientific and Technical Cooperation

In the period from 20-31 January 1959, the fourth session of the Mixed Polish-Yugoslav Commission for Scientific and Technical Cooperation was held in Warsaw. In accord with established agenda, the results of the scientific and technical cooperation made thus far were analyzed at the session. Also at this session a new program for 1959 for this cooperation was reviewed and approved, and the possibility of developing a plan for long-range cooperation was discussed.

In the opinion of the Commission, the technical scientific and cooperation between both countries has up to now been favorable, and the only difficulties encountered by the Secretariat of the Commission were difficulties connected with the exchange of technical documentation.

These difficulties resulted chiefly from a vague outline of the tasks, which entailed the necessity of additional explanations. This, in turn, delayed aid, the basic feature of which, was and is the solution of urgent production of scientific problems.

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Poland, a country more developed industrially, gave Yugoslavia more scientific and technical aid. Evidence of this is the fact that about 120 Yugoslav specialist have been accepted for practical work by Polish production plants ^{and} scientific enterprises.

About three-fourths of these specialists received practical training in factories and plants under the Ministry of Heavy Industry, the Ministry of the Chemical Industry, and the Ministry of Food Industry and Purchases. The average practical training of Yugoslav specialists was 1 1/2 months, although in some cases, but rare, practical training was 3 and 4 months.

Only a few documentation sets were assigned to Yugoslavia by Poland because of the ambiguity of the recommendations mentioned above. Among the most important documentation assigned to Yugoslavia thus far covers production of steam valves and fittings.

At the fourth session, Yugoslavia presented a very extensive plan of a program, about 70 percent of which was accepted by Poland.

Poland rejected only those recommendations which it could not accept because of the lack of experience. Sixty percent of Poland's plan for a program of cooperation, smaller by two-thirds than the Yugoslav program, was accepted ~~by Yugoslavia~~ by Yugoslavia.

The lack of proper experience was the reason for rejecting certain Polish suggestions.

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As a result of the discussions at the session, it was resolved that Poland will transfer to Yugoslavia 14 technical documentation.

The more important of these are:

1. Construction documentation for shaping machines, boring lathes, air hammers, and a few auxiliary casting machines.
2. Technological documentation for the production of hexamethyl-tetramine.
3. Technological documentation for the production of artificial glues.

In keeping with the resolutions of the fourth session, Poland will accept about 130 Yugoslav specialists for practical training mainly in plants of the heavy, the light, and the mining industries.

Practical training in the heavy industry will include, among other things, the production of seamless pipes, roasted magnesite, pig iron, bicycles, motorcycles; the technology of enamelling; the designing and the construction of electric power machines and equipment, etc. In the mining industry, this practical training will include extraction, processing, and enrichment of black coal and brown coal, and the production of equipment for the coal industry. In the light industry, practical training will concentrate, primarily, on spinning, weaving, and dyeing and finishing of cotton and woollen textiles, with emphasis particularly on an economic consumption of auxiliary agents. Moreover, Poland will send several experts to Yugoslavia to give aid, primarily, in the field of production of optical products and in coal extraction.

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In accord with the protocol of the fourth session, Yugoslavia will transfer to Poland three technical documentation sets, of which 2 will be within the light industry. Also, Yugoslavia will accept for practical training, chiefly production training, about 80 Polish specialists for training in the chemical industry, the construction materials industry, and in nonferrous metals processing.

Of greatest interest to Poland is the practical training in the production of acetate, vinyl, vinyl chloride, tannins, and white cement; in the finishing of pigskin, in the processing of lead concentrates and in processing of nonferrous and light metals.

^NOf the whole, the program for scientific and technical cooperation for 1959 proposes a further expansion of mutual experiences between ~~and Yugoslavia. However the~~ Poland ~~supplementation~~ of this program as presented by both countries during the discussions at the fourth session must be taken into consideration and additionally analyzed.

One of the most essential resolutions of the fourth session of the Commission is the resolution on undertaking the study to give the scientific and technical cooperation between Poland and Yugoslavia a more planned character by extending this cooperation over a longer period of time. As a result of the discussion, it was established that sources for the development of such a program are trade pacts, economic cooperation agreements, as well as plans for the economic expansion of both countries. This program should also consider, on a wider scale, the direct cooperation of the scientific research institutes, and the designing and planning bureaus.

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In accord with the Statute of the Commission, it was established to hold the fifth session in September in Belgrade, emphasizing the necessity of more frequent meetings of the secretaries of both countries for the elimination of difficulties by the fulfillment of the resolutions of the Commission.

Cooperation on Third Markets

In the period from 18-20 January 1959, a meeting was held in Warsaw by the delegation of G.S.I. GUMPF (Polish import-export firm) and the delegation of representatives of Yugoslav industrial plants associated as the INERA Enterprise. The subject of the meeting was to define the principles of cooperation between GUMPF and INERA on third markets, and to establish the sphere of cooperation of both countries in exports of individual industrial plants.

The approved principles of cooperation cover exports of sugar plants, soda factories, mining equipment, electric power equipment, and cement plants; and define the rights and duties of the contract parties in making offers, in concluding transactions, in making of deliveries, in accounting, and in rendering of possible credit to consumer.

The main general principle is to show mutual confidence and concern about the interests of the co-partner, and to inform each other of the possibilities of concluding export transactions and of cooperating in the fulfillment of these transactions. The general supplier of plants should be, in principle, the country having at its disposal the greatest

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capabilities and experiences on the consumer's market. This question, however, will be regulated by agreements between CENKOP and INERA. CENKOP has reserved the right for itself to be exclusively the general supplier of sugar beet plants. Offers presented to a client by the general supplier are developed by both parties to the contract; a contract is concluded by the general supplier, with the sub-supplier's approval of the contents of the contract. Independent of the contract signed with the customer, INERA and CENKOP will conclude cooperation contracts defining the extent of deliveries by each country their conditions and terms, and the methods of accounting and payments. The offered prices will be based on world prices, and the delivery prices will, in principle, be calculated in the currency of the customer country. Payments for deliveries between CENKOP and INERA will be regulated either through Polish-Bulgarian clearing account, through a clearing account of another country, or through exchange deliveries in currency obtained from the buyer. Credit extended to customers for the purchase of individual plants will be assigned by both countries in proportion to the value of the deliveries.

[Note: Page 34, from the middle to the bottom, is illegible.]

Therefore, talks on this subject should be treated as a kind of mutual information on the production possibilities of both countries, which will be utilized in cases of concrete transactions in accord with separate agreements between both countries.

The meeting of the representatives of CENKOP and INERA should be considered as favorable.

Cooperation of the Motor Vehicle Industries of Poland and Yugoslavia

In the period between 1-10 of February of this year, talks were conducted in Warsaw between representatives of the Association of the Motor Vehicle Industry of Poland, and the representatives of the Association of Producers of Motors and Mechanical Vehicles of Yugoslavia.

These talks occurred as a result of the implementation of the resolutions of the Polish-Yugoslav Committee for Economic Cooperation. The goal of these talks was to establish cooperation between both industries, especially in automobile production production. At these meetings, it was disclosed that even though the motor vehicle industries of both countries have their present and future development on diverse experiences and licenses, certain possibilities do exist for cooperation. Yugoslavia could utilize Poland's greater experience in the automotive industry.

Moreover, the discussions disclosed the possibilities of cooperation in the production of high compression motors of certain types and in the implementation of investment plans already established.

During the discussions, it was resolved to expand mutual scientific and technical cooperation by making available proper practical training to specialists in various plants and in designing bureaus of both industries. Because of Yugoslavia's interest in possible purchase of machines and equipment for respective Yugoslav factories now under development, Poland also included representatives of other associations of the heavy industry, and of Polish central foreign trade offices in the discussions.

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At the end of the talks, it was established that for the purpose of expanding the cooperation between both industries in the current year, and for the purpose of mutually developing a plan for further cooperation, a delegation of the Association of the Motor Vehicle Industry of Poland will go to Yugoslavia to visit appropriate Yugoslav plants.

The above mentioned talks disclosed that the motor vehicle industry in Poland has a much better developed production base than the similar industry in Yugoslavia.

[The page between ~~35~~ and 36 is illegible]

Among others, Hungary refused to render aid in the production of installation equipment, nets and cathodes for miniature lamps, automotive headlights, aluminum milk cans, central telephone boards, electro-spark machine tools, photograph materials, some pharmaceuticals, new styles of footwear, preparation of leather and furs, and others.

It was at the 15th session that a radical change occurred in the attitude -- negative up to now -- of Hungary, and all Polish recommendations were accepted, with the exception of those covering fields in which Hungary does not have suitable experience, or in which Hungary specializes in accord with COM. In the above mentioned period, Poland utilized Hungarian experiences mainly in the spheres of nonferrous metals industry (aluminum oxide, and processing of aluminum), engineering industry (small- and average-capacity turbine, turbine-generators,

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high voltage technology), chemical industry (mixed fertilizers, glass, pharmaceuticals), and industrial construction. Hungary utilized Poland's experiences in the fields of mining, engineering industry (batteries), agriculture, and wood industry. Within the framework of the scientific and technical cooperation, Poland obtained 11 documentation sets from Hungary, and sent specialists for practical training to Hungary. Poland, in return, assigned 8 documentation sets to Hungary and accepted 32 specialists from Hungary for practical training.

[Note: The following sentence (p 35 of original document) is poorly reproduced.]

Economic Cooperation

On 25 October 1958, a pact was concluded on the formation of a Polish-Hungarian Permanent Commission for Economic Cooperation. This commission resolved to review the possibility of economic cooperation in the following fields:

1. Exchange deliveries of Hungarian aluminum oxide for Polish metallurgical aluminum.
2. Exchange of metallurgical products (rolled).
3. Division of production of some assortments of high-voltage equipment.
4. Cooperation between motor vehicle industries (possible standardization of parts in future production of trucks....

[Note: Continuity of subject matter now lost.]

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[Start of page 37]

7. Resolutions and directives pertaining to the activities of
the Committee for Economic and Scientific-Technical Co-
operation with Poland:

Resolutions of the Council of Ministers:

No 373/58, dated 8 October 1958, covers the acceptance
of the resolutions of the ninth session of CECA.

No 34/59, dated 16 January 1959, covers the approval
of the resolutions of the tenth session of CECA.

Directives of the Chairman of the Council of Ministers:

No 11, dated 2 February 1959, covers the fulfillment of the resolutions
of the tenth session of CECA.

No 43, dated 31 March 1959, supplements Directive No 222 of the Chairman
of the Council of Ministers, dated 1 November 1958, on the designation
of deputy representatives of Poland in CECA, and on the appointment of
workers in the organs of CECA and in the Office of the Deputy repre-
sentative of Poland in CECA. [End of page 37.]